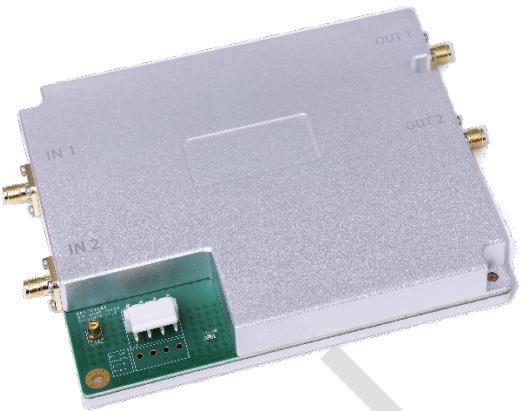


DPA-HG-10 is a dual-channel 2×10 W TDD bidirectional high-gain RF power amplifier launched by Zencheer. Measuring 131 × 110 mm, it operates over 500–1500 MHz and delivers high-linearity output, making it compatible with radio modules supporting standards such as WiFi, LTE, and DVB-T.



Key Features

- Supports 2×2 MIMO with integrated TX/RX amplifiers, TDD mode
- Onboard DC-DC boost converter, supporting a wide input voltage range
- Comprehensive protection design
- Operating band can be customized on request
- Up to 10 W output power per channel

Specifications

Frequency Range	Typical: 1420–1530 MHz Customizable within 500–1500 MHz on request
Bandwidth	Typical: 110 MHz
Tx Channel	
Gain	Typical: 19 dB Can be customized up to 30 dB (maximum)
Output Power	40 dBm ± 1 dB
EVM	≤ -25 dB @ 40 dBm ≤ -28 dB @ 37 dBm
Rx Channel	
Gain	Typical: 12 dB
RF Connectors	SMA
Control Interface	
Connector	MMCX
Switch Logic	Logic high (1.8–3.3 V) enables TX Logic low (0 V) enables RX
Switch Speed	< 1 µs
Power Supply	20–27 V
Size	131 × 110 × 21 mm (excluding SMA connectors)
Weight	Approx. 500 g
Temperature	Storage: -40 to +125 °C Operating: -20 to +65 °C
Power Consumption	100 W @ 70% TX duty cycle

Interface Definitions

Interface	Description
IN1/IN2	RF signal I/O, connect to the RF module
OUT1/OUT2	PA output and LNA input, connect to the antenna
CTRL	TX/RX control signal
PWR	4-pin power connector for PA power input: Pins 1 and 2 are positive (+), Pins 3 and 4 are negative (-)

Ordering Information

Model	Frequency Range	Tx Gain	Tx Power	Rx Gain
DPA1470-HG-10	1420-1530 MHz	19 dB	40 dBm	12 dB

Physical Size

